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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Jun 03	New e-mail delivery for search results now available
NEWS 4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 7	Sep 03	JAPIO has been reloaded and enhanced
NEWS 8	Sep 16	Experimental properties added to the REGISTRY file
NEWS 9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11	Oct 24	BEILSTEIN adds new search fields
NEWS 12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13	Nov 18	DKILIT has been renamed APOLLIT
NEWS 14	Nov 25	More calculated properties added to REGISTRY
NEWS 15	Dec 04	CSA files on STN
NEWS 16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
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NEWS 18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS 20	Feb 13	CANCERLIT is no longer being updated
NEWS 21	Feb 24	METADEX enhancements
NEWS 22	Feb 24	PCTGEN now available on STN
NEWS 23	Feb 24	TEMA now available on STN
NEWS 24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 25	Feb 26	PCTFULL now contains images
NEWS 26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27	Mar 19	APOLLIT offering free connect time in April 2003
NEWS 28	Mar 20	EVENTLINE will be removed from STN
NEWS 29	Mar 24	PATDPAFULL now available on STN
NEWS 30	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 31	Apr 11	Display formats in DGENE enhanced
NEWS 32	Apr 14	MEDLINE Reload
NEWS 33	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 34	Apr 21	Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS 35	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 36	Apr 28	RDISCLOSURE now available on STN

NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items

NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 12:58:58 ON 28 APR 2003

=> file medline embase biosis scisearch caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'MEDLINE' ENTERED AT 12:59:11 ON 28 APR 2003

FILE 'EMBASE' ENTERED AT 12:59:11 ON 28 APR 2003

FILE 'BIOSIS' ENTERED AT 12:59:11 ON 28 APR 2003

FILE 'SCISEARCH' ENTERED AT 12:59:11 ON 28 APR 2003

FILE 'CAPLUS' ENTERED AT 12:59:11 ON 28 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

=> s pain measurement
L1 18892 PAIN MEASUREMENT

=> s l1 and analog scale
L2 1371 L1 AND ANALOG SCALE

=> s l2 and anesthetic
L3 249 L2 AND ANESTHETIC

=> s l3 and "0.1 mg to 0.3 mg per injection"
L4 0 L3 AND "0.1 MG TO 0.3 MG PER INJECTION"

=> s l3 and "0.1 to 0.3 mg"
L5 0 L3 AND "0.1 TO 0.3 MG"

=> s l3 and injection
L6 108 L3 AND INJECTION

=> s l6 and bee venom
L7 0 L6 AND BEE VENOM

=> s l3 and bee venom
L8 0 L3 AND BEE VENOM

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=> dup remove l6
PROCESSING COMPLETED FOR L6
L9          106 DUP REMOVE L6 (2 DUPLICATES REMOVED)

=> s l9 adn "57"
MISSING OPERATOR L9 ADN
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s l9 and "57"
L10           2 L9 AND "57"

=> dup remove l10
PROCESSING COMPLETED FOR L10
L11           2 DUP REMOVE L10 (0 DUPLICATES REMOVED)

=> d l11 1-2 cbib abs

L11  ANSWER 1 OF 2     MEDLINE
2003160920  Document Number: 22564548.     PubMed ID: 12678150.   Double-blind
     randomized comparison of xylocaine and saline in paracervical block for
     diagnostic fractional curettage. Titapant Vitaya; Chawanpaiboon Saifon;
     Boonpektrakul Kudkanang. (Department of Obstetrics and Gynaecology,
     Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok 10700,
     Thailand. ) JOURNAL OF THE MEDICAL ASSOCIATION OF THAILAND, (2003 Feb) 86
     (2) 131-5.  Journal code: 7507216. ISSN: 0125-2208. Pub. country:
     Thailand. Language: English.
AB   Comparative study of the level of the reported pain between patients who
     received xylocaine and normal saline for paracervical block during
     fractional curettage was carried out in 70 patients in a double blind
     randomized controlled trial.  One group of patients received xylocaine for
     paracervical block just before the procedure was performed while the other
     group received normal saline in the same manner.  Self-reported pain
     intensity using visual analog scale was assessed at
     four time points including the first time point when Allis tissue forceps
     was applied on the cervix, the second and third time points when curettage
     was done on the endocervix and in the endometrial cavity respectively.
     The last time point was evaluated at 30 minutes after the procedure.  The
     results of the study revealed pain occurring in patients in the normal
     saline group was more severe than those in the xylocaine group with
     statistically significant difference at the second time point (visual
     analog scale 4.80 +/- 2.7 in the normal saline group
     compared to 3.20 +/- 2.4 in the xylocaine group, p < 0.05) and third time
     point (visual analog scale 8.17 +/- 2.0 in the normal
     saline group compared to 4.94 +/- 3.1 in the xylocaine group, p < 0.05 ).
     On the contrary, pain occurring in patients in the normal saline group and
     xylocaine group was not statistically significantly different at the first
     time point (visual analog scale 3.62 +/- 2.7 in the
     normal saline group compared to 3.97 +/- 2.8 in the xylocaine group, p >
     0.05) and the fourth time point (visual analog scale
     1.34 +/- 2.0 in the normal saline group compared to 1.57 +/- 2.6
     in the xylocaine group, p > 0.05).  Before this study, there was an idea
     that normal saline solution could be considered for the paracervical
     injection solution.  The explanation for this was the local
     anesthetic mechanism may be from distension of nerve capsules
     rather than blockage of specific autonomic nerves.  However, this study
     showed that nerve capsule distension is not the only factor for pain
     control in paracervical block.  An analgesic agent is still an important
     factor.

L11  ANSWER 2 OF 2     MEDLINE
1998242695  Document Number: 98242695.     PubMed ID: 9583393.   Saline with
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benzyl alcohol as intradermal anesthesia for intravenous line placement in children. Fein J A; Boardman C R; Stevenson S; Selbst S M. (The Children's Hospital of Philadelphia, PA 19104, USA.) PEDIATRIC EMERGENCY CARE, (1998 Apr) 14 (2) 119-22. Journal code: 8507560. ISSN: 0749-5161. Pub. country: United States. Language: English.

AB BACKGROUND: It has been suggested that saline with benzyl alcohol preservative has **anesthetic** properties when injected intradermally. We compared the pain associated with intravenous line (i.v.) placement in patients who received intradermal lidocaine, intradermal saline + benzyl alcohol preservative, or no anesthesia. METHODS: We performed a prospective randomized clinical trial in a convenience sample of children over 6.8 years old seen in the emergency department of a large, urban children's hospital. Children received either intradermal saline with 0.9% benzyl alcohol preservative, intradermal lidocaine, or no anesthesia prior to i.v. placement. The patient recorded the pain of the entire procedure on a visual **analog scale**. In the two groups that received an intradermal **injection**, the patient also recorded the pain of the first and second **injection** on a similar scale. RESULTS: Ninety-nine children were studied, 33 in each group. Pain scores were not normally distributed. The median pain scores in millimeters for the entire procedure were 41.0 (interquartile range, 11 to 62) in the nonanesthetic group, 9.0 (interquartile range 3 to 37) in the saline with benzyl alcohol group, and 10.0 (interquartile range, 4 to 32) in the lidocaine group (P = 0.006 for saline vs nonanesthetic, P = 0.04 for lidocaine vs nonanesthetic, P = 0.**57** for saline vs lidocaine). There was no difference between groups with regard to baseline anxiety, demographic characteristics, size of i.v. inserted, number of i.v. attempts, or pain upon intradermal **injection**. CONCLUSION: Saline with benzyl alcohol and 1% lidocaine are equally effective as intradermal **anesthetics** for i.v. line placement in children, and are both more effective than no anesthesia.

```
=> s bee venom
L12       8028 BEE VENOM

=> s l12 and injection
L13        580 L12 AND INJECTION

=> s l13 and "0.01mg"
L14          0 L13 AND "0.01MG"

=> s l13 and "1 mg"
L15         17 L13 AND "1 MG"

=> dup remove l15
PROCESSING COMPLETED FOR L15
L16           9 DUP REMOVE L15 (8 DUPLICATES REMOVED)

=> d l16 1-9 cbib abs
```

L16 ANSWER 1 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1

2002:399112 Document No.: PREV200200399112. The effect of whole **bee venom** on arthritis. Kang, Seong Soo; Pak, Sok Cheon; Choi, Seok Hwa (1). (1) College of Veterinary Medicine, Research Institute of Veterinary Medicine, Chungbuk National University, 48 Gaeshin-dong Heungduk-gu, Cheongju, Chungbuk, 361-763: shchoi@cbucc.chungbuk.ac.kr South Korea. American Journal of Chinese Medicine, (2002) Vol. 30, No. 1, pp. 73-80. print. ISSN: 0192-415X. Language: English.

AB This study was performed to assess the clincotherapeutic effect of whole venom of honeybee (Apis mellifera) in adjuvant-induced arthritic rat. Ninety Sprague-Dawley male rats were injected with complete Freund's

adjuvant (CFA). Adjuvant arthritis was produced by a single subcutaneous **injection** of **1 mg** Mycobacterium butyricum suspended in 0.1 ml paraffin oil into the right hind paw. Righting reflex was uniformly lost and considered to be the point of arthritis development on day 14 after CFA **injection**. The experiments were divided into three groups. When arthritis was developed in the rat, tested groups were administered with prednisolone (10 mg/kg, p.o.) or honeybee venom (one bee, s.c.) every other day for another 14 days. Control group was injected with 0.1 ml of physiological saline solution subcutaneously. Clinical and hematological values with histopathological findings were observed during the drug administration. In treatment groups, the development of inflammatory edema and polyarthritis was suppressed. No significant differences of hind paw edema volume and lameness score between prednisolone and honeybee venom groups were observed during treatment. White blood cell counts of control group showed leucocytosis that was significantly different from the two treatment groups ($p<0.01$). Erosions of articular cartilage and inflammatory cell infiltrations into interphalangeal joint were effectively suppressed in treated groups. In conclusion, whole honeybee venom was found to suppress arthritic inflammation in the rat. This may be an alternative treatment of arthritic agony in humans.

L16 ANSWER 2 OF 9 MEDLINE DUPLICATE 2

2001305459 Document Number: 21157700. PubMed ID: 11207399. **Bee venom injection** into an acupuncture point reduces arthritis associated edema and nociceptive responses. Kwon Y B; Lee J D; Lee H J; Han H J; Mar W C; Kang S K; Beitz A J; Lee J H. (Department of Veterinary Physiology, College of Veterinary Medicine and School of Agricultural Biotechnology, Seoul National University, Suwon 441-744, South Korea.) PAIN, (2001 Feb 15) 90 (3) 271-80. Journal code: 7508686. ISSN: 0304-3959. Pub. country: Netherlands. Language: English.

AB **Bee venom** (BV) has traditionally been used in Oriental medicine to relieve pain and to treat inflammatory diseases such as rheumatoid arthritis (RA). While several investigators have evaluated the anti-inflammatory effect of BV treatment, the anti-nociceptive effect of BV treatment on inflammatory pain has not been examined. Previous studies in experimental animals suggest that the therapeutic effect of BV on arthritis is dependent on the site of administration. Because of this potential site specificity, the present study was designed to evaluate the anti-nociceptive effect of BV **injections** into a specific acupoint (Zusanli) compared to a non-acupoint in an animal model of chronic arthritis. Subcutaneous BV treatment (**1 mg**/kg per day) was found to dramatically inhibit paw edema caused by Freund's adjuvant **injection**. Furthermore, BV therapy significantly reduced arthritis-induced nociceptive behaviors (i.e. the nociceptive scores for mechanical hyperalgesia and thermal hyperalgesia). These anti-nociceptive/anti-inflammatory effects of BV were observed from 12 days through 21 days post-BV treatment. In addition, BV treatment significantly suppressed adjuvant-induced Fos expression in the lumbar spinal cord at 3 weeks post-adjuvant **injection**. Finally, **injection** of BV into the Zusanli acupoint resulted in a significantly greater analgesic effect on arthritic pain as compared to BV **injection** in to a more distant non-acupoint. The present study demonstrates that BV **injection** into the Zusanli acupoint has both anti-inflammatory and anti-nociceptive effects on Freund's adjuvant-induced arthritis in rats. These findings raise the possibility that BV acupuncture may be a promising alternative medicine therapy for the long-term treatment of rheumatoid arthritis.

L16 ANSWER 3 OF 9 MEDLINE DUPLICATE 3

2001108790 Document Number: 21068616. PubMed ID: 11154835. Establishment of **bee venom**-induced contralateral heat hyperalgesia in the rat is dependent upon central temporal summation of afferent input

from the site of injury. Chen H S; Chen J; Chen J; Guo W G; Zheng M H. (Department of Anatomy and K.K. Leung Brain Research Centre, The Fourth Military Medical University, 17 West Chang-le Road, 710032, PR, Xi'an, China.) NEUROSCIENCE LETTERS, (2001 Jan 26) 298 (1) 57-60. Journal code: 7600130. ISSN: 0304-3940. Pub. country: Ireland. Language: English.

AB The present investigation was designed to study whether central sensitization is determined by a time window of central summation of ongoing primary afferent input from a peripheral injury site. Sensitization was assessed behaviorally in the rat as contralateral heat hyperalgesia induced by **injection** of **bee venom** (BV) in the hind paw. The sciatic nerve was transected at various time points following intraplantar BV **injection** to analyze the time window for contralateral hyperalgesia. The results show that after a dose of 0.2 mg BV, axotomy at 5 min completely prevented contralateral heat hyperalgesia but was without effect at 10 min, whereas after a dose of 0.**1 mg** BV, axotomy at 10 min was able to prevent the contralateral heat hyperalgesia but remained without effect at 20 min. These findings suggest an important role of the amount of ipsilateral ongoing primary afferent in establishing the contralateral heat hyperalgesia. Moreover, by counting the total amount of paw flinches that is believed to be mediated by ongoing primary afferent input, it was shown that 87.35+/-5.36, 170.50+/-9.15 and 305.80+/-20.13 flinches were induced by 0.2 mg BV for a period of 5, 10 and 20 min, respectively. At the lower dose of 0.**1 mg** BV significant fewer flinches were elicited with 59.17+/-13.54, 133.00+/-22.33 and 234.00+/-36.42 within the three corresponding time windows before sciatic nerve transection. The results suggest that the amount of primary afferent input determines the time window required to establish central changes that are independent of further afferent input.

L16 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS

1977:562479 Document No. 87:162479 Changes induced in cat serum by **bee venom**, melittin and apamin: the therapeutic effect of propranolol. Ishay, Jacob; Fischl, Joseph; Rothem, Frida; Talmor, Nira; Buimovitch, Bella; Asanta, Mina (Dep. Physiol. Pharmacol., Sackler Sch. Med., Ramat-Aviv, Israel). Toxicon, 15(4), 283-91 (English) 1977. CODEN: TOXIA6. ISSN: 0041-0101.

AB **Injection** of cats with sublethal doses of **bee venom** (**1 mg**/kg) or its toxic components melittin [37231-28-0] (**1 mg**/kg) or apamin [24345-16-2] (0.5 mg/kg) induced hyperglycemia, decreases in blood serum Na and Ca levels, and increases in serum K and phosphate levels. Propranolol [525-66-6] (**1 mg**, s.c.) counteracted most of these effects. Whole venom and apamin decreased the serum Cl- level, and the apamin-induced changes were not reversed by propranolol. Whole venom also decreased the alk. phosphatase [9001-78-9] level, whereas apamin increased it. Melittin decreased, and whole venom and apamin increased the serum protein levels. Propranolol counteracted most of the serum changes induced by **bee venom** and its toxic components.

L16 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS

1974:499442 Document No. 81:99442 Antiinflammatory property of 401 (MCD-peptide), a peptide from the venom of the bee Apis mellifera. Hanson, Jennifer M.; Morley, J.; Soria-Herrera, C. (Div. Immunol., Kennedy Inst. Rheumatol., London, UK). British Journal of Pharmacology, 50(3), 383-92 (English) 1974. CODEN: BJPCBM. ISSN: 0007-1188.

AB Peptide 401 (I) [32908-73-9] (**1 mg**/kg, s.c.) from **bee venom** inhibited the edema provoked by subplantar **injection** of carrageenan or intraarticular **injection** of turpentine in the rat, and also suppressed the increased vascular permeability due to intradermal **injection** of smooth muscle spasmogens. I probably exerts its antiinflammatory effect by rendering the vascular endothelium anergic to phlogistic stimuli. Pretreatment with

mepyramine maleate [59-33-6] or methysergide bimaleate [129-49-7] abolished the increased vascular permeability but not the antiinflammatory effects produced by I. The latter were also unaffected by regional denervation or pretreatment with phenoxybenzamine-HCl, but were reduced by adrenalectomy.

L16 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS
1973:401131 Document No. 79:1131 Mechanism of change of blood pressure and frequency of heartbreak caused by **bee venom**. Korneva, N. V. (USSR). Uchenye Zapiski Gor'kovskogo Gosudarstvennogo Universiteta im. N. I. Lobachevskogo, No. 140, 56-60 (Russian) 1972. CODEN: UZGUAB. ISSN: 0372-5065.
AB I.v. (**1 mg**/kg) or endocardial (0.7 mg/kg, into the right atrium) **injection** of **bee venom** decreased the blood pressure and rate of cardiac contractions in anesthetized cats. Vagotomy eliminated the bradycardiac effect of **bee venom** and reduced the intensity of its hypotensive action. Cardiac receptors apparently participate directly in the mechanism of **bee venom** toxic action.

L16 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS
1973:401124 Document No. 79:1124 Effect of **bee venom** on bile secretion in dogs. Poberezhskaya, T. I.; Kireeva, V. F.; Zolotovitskaya, D. A. (USSR). Uchenye Zapiski Gor'kovskogo Gosudarstvennogo Universiteta im. N. I. Lobachevskogo, No. 140, 9-13 (Russian) 1972. CODEN: UZGUAB. ISSN: 0372-5065.
AB Native **bee venom** (**1 mg**/kg. s.c.) initially decreased and then increased (to almost 2 times normal 2-3 days postinjection) the level of bile secretion in dogs. The amts. of bilirubin [635-65-4] and cholesterol [57-88-5] secreted with the bile increased on the 3rd day after venom **injection** and then returned to normal 6-8 days postinjection. The increase in bile bilirubin level may be related to the hemolytic action of **bee venom**, whereas the increased cholesterol content may be connected with the protective reaction in dogs.

L16 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS
1969:95050 Document No. 70:95050 Identification of the direct lytic factor from cobra venom as cardiotoxin. Slotta, Karl H.; Vick, James A. (Sch. of Med., Univ. of Miami, Miami, FL, USA). Toxicon, 6(3), 167-73 (English) 1969. CODEN: TOXIA6. ISSN: 0041-0101.
AB The most basic polypeptide in cobra (Naja naja) venom was isolated by chromatog. on CM-Sephadex columns as a chromatographically and electrophoretically uniform substance. This polypeptide contained the total, rather low, direct lytic activity and also the total, very strong, cardiotoxic activity of the venom. Therefore, this fraction should be named cardiotoxin rather than direct lytic factor (DLF). Since cardiotoxin and phospholipase A showed a synergistic action in hemolyzing human erythrocytes, an in vivo synergism was sought for i.v. **injections** of **1 mg**. of cardiotoxin/kg. into dogs and monkeys with 2 mg. of phospholipase A/kg. Similar expts. were done with polypeptides from **bee venom**. The lethality of cardiotoxin from cobra venom and of melittin from **bee venom** was potently increased by the **injection** of phospholipase A either before or after cardiotoxin or melittin. When the 2nd **injection** was of phospholipase A, animals died from respiratory failure, but when the order of **injections** was reversed, they died of ventricular fibrillation.

L16 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS
1969:104750 Document No. 70:104750 Effect of **bee venom** on carotid chemoreceptors. Korneva, N. V.; Orlov, B. N. (Gor'k. Gos. Univ. im. Lobachevskogo, Gorki, USSR). Biologicheskie Nauki (Moscow) (2),

42-5 (Russian) 1969. CODEN: BINKBT. ISSN: 0470-4606.

AB **Bee venom** administered at 0.2-**1 mg** . to anesthetized cats through perfusion or direct **injection** into the carotid artery or by addn. to a completely isolated carotid sinus increased the afferent impulses of the sinus nerve and blood pressure and stimulated respiration through action on the chemoreceptors of the carotid glomus.

=> d his

(FILE 'HOME' ENTERED AT 12:58:58 ON 28 APR 2003)

FILE 'MEDLINE, EMBASE, BIOSIS, SCISEARCH, CAPLUS' ENTERED AT 12:59:11 ON 28 APR 2003

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L1        18892 S PAIN MEASUREMENT
L2         1371 S L1 AND ANALOG SCALE
L3          249 S L2 AND ANESTHETIC
L4            0 S L3 AND "0.1 MG TO 0.3 MG PER INJECTION"
L5            0 S L3 AND "0.1 TO 0.3 MG"
L6          108 S L3 AND INJECTION
L7            0 S L6 AND BEE VENOM
L8            0 S L3 AND BEE VENOM
L9          106 DUP REMOVE L6 (2 DUPLICATES REMOVED)
L10           2 S L9 AND "57"
L11           2 DUP REMOVE L10 (0 DUPLICATES REMOVED)
L12        8028 S BEE VENOM
L13         580 S L12 AND INJECTION
L14           0 S L13 AND "0.01MG"
L15          17 S L13 AND "1 MG"
L16           9 DUP REMOVE L15 (8 DUPLICATES REMOVED)
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=> s l13 and visual analog scale

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L17           1 L13 AND VISUAL ANALOG SCALE
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=> d l17 cbib abs

L17 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

1989:429996 Document No.: BA88:88254. **BEE VENOM** THERAPY FOR ARTHRITIS. KIM C M. MONMOUTH PAIN INST. INC., RED BANK, N.J., U.S.A. 07701.. RHUMATOLOGIE, (1989) 41 (3), 67-72. CODEN: RHUMAY. Language: English.

AB **Bee Venom** therapy for arthritis remains somewhat controversial. Unfortunately, there are very few controlled studies available to guide clinical practice. One Hundred and Eight patients with longstanding history of arthritis (RA or OA) who failed to respond to conventional medical treatment were used as subjects (Sept. 85 to Sept. 87). Participation was on a voluntary basis as denoted by informed consents from all subjects. All subjects were tested for possible allergic reaction before initial treatment. 0.1 ml. standard BV-10 was injected intradermally twice a week. The number of **injections** increased gradually each subsequent treatment until evaluation showed markedly improved or completely resolved. Pain was most common problem with subjects. Pain measure included the McGill Pain Questionnaire and **Visual Analog Scales**. Clinical evaluation included serial physical examinations and the thermographic findings. Each subject was followed 6 months to 2 years after finished treatment. Most of subjects, showed slight improvements after 3rd session and marked improvement average 12th treatment. Total 33,644 **injections** were given. No clinical complications or serious side effects were observed in any subjects who participated in the study. It was concluded the **bee venom** therapy is safe, effective and has no serious side effects, as long as a person is not allergic to **bee**

venom. The preliminary results highly suggest that **bee venom** therapy is a new alternative approach for arthritis victims who failed to respond to the conventional medical treatments.

=> s l13 and anesthetic
L18 0 L13 AND ANESTHETIC

=> s l13 and osteoarthritis
L19 4 L13 AND OSTEOARTHRITIS

=> dup remove l19
PROCESSING COMPLETED FOR L19
L20 4 DUP REMOVE L19 (0 DUPLICATES REMOVED)

=> d l20 1-4 cbib abs

L20 ANSWER 1 OF 4 SCISEARCH COPYRIGHT 2003 THOMSON ISI
2001:246415 The Genuine Article (R) Number: 409JZ. **Bee venom injection** into an acupuncture point reduces arthritis associated edema and nociceptive responses. Kwon Y B; Lee J D; Lee H J; Han H J; Mar W C; Kang S K; Beitz A J; Lee J H (Reprint). Seoul Natl Univ, Coll Vet Med, Dept Vet Physiol, Suwon 441744, South Korea (Reprint); Seoul Natl Univ, Sch Agr Biotechnol, Suwon 441744, South Korea; Kyung Hee Univ, Coll Oriental Med, Dept Acupuncture & Moxibust, Seoul, South Korea; Chonnam Natl Univ, Hormone Res Ctr, Kwangju, South Korea; Seoul Natl Univ, Inst Nat Prod Res, Seoul, South Korea; Univ Minnesota, Coll Vet Med, Dept Vet Pathobiol, St Paul, MN 55108 USA. PAIN (15 FEB 2001) Vol. 90, No. 3, pp. 271-280. Publisher: ELSEVIER SCIENCE BV. PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS. ISSN: 0304-3959. Pub. country: South Korea; USA. Language: English.
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB **Bee venom** (BV) has traditionally been used in Oriental medicine to relieve pain and to treat inflammatory diseases such as rheumatoid arthritis (RA). While several investigators have evaluated the anti-inflammatory effect of BV treatment, the anti-nociceptive effect of BV treatment on inflammatory pain has not been examined. Previous studies in experimental animals suggest that the therapeutic effect of BV on arthritis is dependent on the site of administration. Because of this potential site specificity. the present study was designed to evaluate the anti-nociceptive effect of BV **injections** into a specific acupoint (Zusanli) compared to a non-acupoint in an animal model of chronic arthritis. Subcutaneous BV treatment (1 mg/kg pet day) was found to dramatically inhibit paw edema caused by Freund's adjuvant **injection**. Furthermore, BV therapy significantly reduced arthritis-induced nociceptive behaviors (i.e. the nociceptive scores for mechanical hyperalgesia and thermal hyperalgesia). These anti-nociceptive/anti-inflammatory effects of BV were observed from 12 days through 21 days post-BV treatment. In addition, BV treatment significantly suppressed adjuvant-induced Fos expression in the lumbar spinal cord at 3 weeks post-adjuvant **injection**. Finally, **injection** of BV into the Zusanli acupoint resulted in a significantly greater analgesic effect on arthritic pain as compared to BV **injection** in to a more distant non-acupoint. The present study demonstrates that BV **injection** into the Zusanli acupoint has both anti-inflammatory and anti-nociceptive effects on Freund's adjuvant-induced arthritis in rats. These findings raise the possibility that BV acupuncture may be a promising alternative medicine therapy for the long-term treatment of rheumatoid arthritis. (C) 2001 International Association for the Study of Pain. published by Elsevier Science B.V. All rights reserved.

L20 ANSWER 2 OF 4 SCISEARCH COPYRIGHT 2003 THOMSON ISI

2001:661494 The Genuine Article (R) Number: 463TZ. The analgesic efficacy of **bee venom** acupuncture for knee **osteoarthritis**: A comparative study with needle acupuncture. Kwon Y B; Kim J H; Yoon J H; Lee J D; Han H J; Mar W C; Beitz A J; Lee J H (Reprint). Seoul Natl Univ, Coll Vet Med, Dept Vet Physiol, Suwon, South Korea (Reprint). AMERICAN JOURNAL OF CHINESE MEDICINE (AUG 2001) Vol. 29, No. 2, pp. 187-199. Publisher: INST ADVANCED RESEARCH ASIAN SCIENCE & MEDICINE, INC. PO BOX 55536, GARDEN CITY, NY 11530 USA. ISSN: 0192-415X. Pub. country: South Korea. Language: English.
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The aim of this investigation was to determine whether **bee venom** (BV) administered directly into an acupoint was a clinically effective and safe method for relieving the pain of patients with knee **osteoarthritis** (OA) as compared to traditional needle acupuncture. We evaluated the efficacy of BV acupuncture using both pain relief scores and computerized infrared thermography (IRT) following 4 weeks of BV acupuncture treatment. We observed that a significantly higher proportion of subjects receiving BV acupuncture reported substantial pain relief as compared with those receiving traditional needle acupuncture therapy. Furthermore, the IRT score was significantly improved and paralleled the level of pain relief.

L20 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
1989:429996 Document No.: BA88:88254. **BEE VENOM** THERAPY FOR ARTHRITIS. KIM C M. MONMOUTH PAIN INST. INC., RED BANK, N.J., U.S.A. 07701.. RHUMATOLOGIE, (1989) 41 (3), 67-72. CODEN: RHUMAY. Language: English.

AB **Bee Venom** therapy for arthritis remains somewhat controversial. Unfortunately, there are very few controlled studies available to guide clinical practice. One Hundred and Eight patients with longstanding history of arthritis (RA or OA) who failed to respond to conventional medical treatment were used as subjects (Sept. 85 to Sept. 87). Participation was on a voluntary basis as denoted by informed consents from all subjects. All subjects were tested for possible allergic reaction before initial treatment. 0.1 ml. standard BV-10 was injected intradermally twice a week. The number of **injections** increased gradually each subsequent treatment until evaluation showed markedly improved or completely resolved. Pain was most common problem with subjects. Pain measure included the McGill Pain Questionnaire and Visual Analog Scales. Clinical evaluation included serial physical examinations and the thermographic findings. Each subject was followed 6 months to 2 years after finished treatment. Most of subjects, showed slight improvements after 3rd session and marked improvement average 12th treatment. Total 33,644 **injections** were given. No clinical complications or serious side effects were observed in any subjects who participated in the study. It was concluded the **bee venom** therapy is safe, effective and has no serious side effects, as long as a person is not allergic to **bee venom**. The preliminary results highly suggest that **bee venom** therapy is a new alternative approach for arthritis victims who failed to respond to the conventional medical treatments.

L20 ANSWER 4 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
84066648 EMBASE Document No.: 1984066648. [Results and difficulties in treatment of rheumatic disease with **injections** of **bee-venom** extract]. RESULTATS ET DIFFICULTES DE TRAITEMENT DE CERTAINS RRHUMATISANTS PAR LES **INJECTIONS** D'EXTRAIT DE VENIN D'ABEILLE. Palmer M.; Forestier F.. France. Rhumatologie 35/6 (289-291) 1983. CODEN: RHUMAY. Pub. Country: France. Language: French.

=> s l13 and Gouty arthritis
L21 0 L13 AND GOUTY ARTHRITIS

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=> d his

     (FILE 'HOME' ENTERED AT 12:58:58 ON 28 APR 2003)

     FILE 'MEDLINE, EMBASE, BIOSIS, SCISEARCH, CAPLUS' ENTERED AT 12:59:11 ON
     28 APR 2003
L1         18892 S PAIN MEASUREMENT
L2          1371 S L1 AND ANALOG SCALE
L3           249 S L2 AND ANESTHETIC
L4             0 S L3 AND "0.1 MG TO 0.3 MG PER INJECTION"
L5             0 S L3 AND "0.1 TO 0.3 MG"
L6           108 S L3 AND INJECTION
L7             0 S L6 AND BEE VENOM
L8             0 S L3 AND BEE VENOM
L9           106 DUP REMOVE L6 (2 DUPLICATES REMOVED)
L10            2 S L9 AND "57"
L11            2 DUP REMOVE L10 (0 DUPLICATES REMOVED)
L12         8028 S BEE VENOM
L13          580 S L12 AND INJECTION
L14            0 S L13 AND "0.01MG"
L15           17 S L13 AND "1 MG"
L16            9 DUP REMOVE L15 (8 DUPLICATES REMOVED)
L17            1 S L13 AND VISUAL ANALOG SCALE
L18            0 S L13 AND ANESTHETIC
L19            4 S L13 AND OSTEOARTHRITIS
L20            4 DUP REMOVE L19 (0 DUPLICATES REMOVED)
L21            0 S L13 AND GOUTY ARTHRITIS

=> s l13 and ankylosing spondylitis
L22            1 L13 AND ANKYLOSING SPONDYLITIS

=> d l22 cbib abs

L22  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
2002:847709   Document No. 137:342129  Bee venom
     compositions for apitherapy.  Kim, Christopher M. (USA).  Jpn. Kokai
     Tokkyo Koho JP 2002322071 A2 20021108, 12 pp.  (Japanese).  CODEN: JKXXAF.
     APPLICATION: JP 2001-130722 20010427.
AB   The invention relates to a bee venom injection
     compn. for treatment of rheumatoid arthritis, bone arthritis, gout,
     psoriasis, myalgia, chronic pain, and chronic inflammation, etc., wherein
     the injection compn. contains active amts. of bee
     venom and local anesthesia.  A cream and patch compns. contg.
     bee venom are also disclosed.  An injection
     compn. contg. bee venom and lidocaine hydrochloride
     (1:1) was administered to a patient with rheumatoid arthritis.


=> s l13 and psoriatic arthritis
L23            1 L13 AND PSORIATIC ARTHRITIS

=> d l23 cbib abs

L23  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
2002:847709   Document No. 137:342129  Bee venom
     compositions for apitherapy.  Kim, Christopher M. (USA).  Jpn. Kokai
     Tokkyo Koho JP 2002322071 A2 20021108, 12 pp.  (Japanese).  CODEN: JKXXAF.
     APPLICATION: JP 2001-130722 20010427.
AB   The invention relates to a bee venom injection
     compn. for treatment of rheumatoid arthritis, bone arthritis, gout,
     psoriasis, myalgia, chronic pain, and chronic inflammation, etc., wherein
     the injection compn. contains active amts. of bee
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venom and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An **injection** compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

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=> s l13 and fibromyalgia
L24          0 L13 AND FIBROMYALGIA

=> s l13 and myofascial dysfunction pain syndrome
L25          0 L13 AND MYOFASCIAL DYSFUNCTION PAIN SYNDROME

=> s l13 and tennis elbow
L26          0 L13 AND TENNIS ELBOW

=> s l13 and bursitis
L27          0 L13 AND BURSITIS

=> s l13 and tendonitis
L28          0 L13 AND TENDONITIS

=> s l13 and inflammation
L29         61 L13 AND INFLAMMATION

=> dup remove l29
PROCESSING COMPLETED FOR L29
L30          27 DUP REMOVE L29 (34 DUPLICATES REMOVED)

=> d l30 1-27 cbib abs
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L30 ANSWER 1 OF 27 MEDLINE DUPLICATE 1
2003083439 Document Number: 22423877. PubMed ID: 12536045. A comparison of hyperalgesia and neurogenic **inflammation** induced by melittin and capsaicin in humans. Sumikura H; Andersen O K; Drewes A M; Arendt-Nielsen L. (Center for Sensory-Motor Interaction (SMI), Department of Health Science and Technology, Aalborg University, Fredrik Bajers Vej 7, Building D3, 9220, Aalborg, Denmark.. sumikura@smi.auc.dk) . NEUROSCIENCE LETTERS, (2003 Feb 13) 337 (3) 147-50. Journal code: 7600130. ISSN: 0304-3940. Pub. country: Ireland. Language: English.
AB Melittin (a main compound of **bee venom**) and capsaicin were injected intradermally in healthy human volunteers: (1) to study secondary mechanical hyperalgesia (static hyperalgesia and dynamic hyperalgesia) around the **injection** site; and (2) to correlate the sensory changes to the neurogenic **inflammation** assessed by laser-doppler blood flowmetry. Melittin 50 microg and capsaicin 10 microg induced comparable spontaneous pain and increased blood flow (neurogenic **inflammation**). Intradermal **injection** of melittin induced regions of secondary mechanical hyperalgesia around the **injection** site, however, they were not as large as the hyperalgesia induced by capsaicin. This is the first report studying mechanical hyperalgesia induced by melittin in humans, and the results were in agreement with the previous observations in rats. Melittin seems to be a valuable model to study a possible contribution of neurogenic **inflammation** to hyperalgesia in humans.

L30 ANSWER 2 OF 27 MEDLINE DUPLICATE 2
2003059340 Document Number: 22423581. PubMed ID: 12535175. The anti-inflammatory effect of **bee venom** stimulation in a mouse air pouch model is mediated by adrenal medullary activity. Kwon Y-B; Kim H-W; Ham T-W; Yoon S-Y; Roh D-H; Han H-J; Beitz A-J; Yang I-S; Lee J-H. (Department of Veterinary Physiology, College of Veterinary Medicine and School of Agricultural Biotechnology, Seoul National University, Suwon, South Korea.) JOURNAL OF NEUROENDOCRINOLOGY, (2003 Jan) 15 (1)

93-6. Journal code: 8913461. ISSN: 0953-8194. Pub. country: England: United Kingdom. Language: English.

AB Cutaneous electrical or chemical stimulation can produce an anti-inflammatory effect, which is dependent on adrenal medullary-sympathetic activation. We have previously shown that peripheral **injection** of **bee venom** (BV) also produces a significant anti-inflammatory effect that is neurally mediated. In the present study, we examined whether this anti-inflammatory effect is also dependent on the adrenal gland using the mouse inflammatory air pouch model. Subcutaneous (s.c.) BV **injection** produced a marked suppression of leucocyte migration and tumour necrosis factor (TNF)-alpha concentration induced by zymosan **injection** into the air pouch. The role of the adrenal gland in this suppression was evaluated in adrenalectomized mice. Adrenalectomy significantly reversed the suppression of leucocyte migration and TNF-alpha elevation caused by BV. Serum concentrations of corticosteroid were increased in mice with zymosan-induced air-pouch **inflammation** and this increase was reduced by BV administration, suggesting that adrenal corticosteroid release is not involved in mediating the anti-inflammatory effects of BV. To test this hypothesis, the corticosteroid receptor antagonist (RU486) was administered and found not to affect the BV-induced inhibition of leucocyte migration. By contrast, pretreatment with the beta-adrenergic antagonist propranolol reversed the BV-induced inhibitory effect on leucocyte migration. These results suggest that the anti-inflammatory effect of s.c. BV administration is mediated in part by the release of catecholamines from the adrenal medulla.

L30 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2003 ACS

2002:847709 Document No. 137:342129 **Bee venom** compositions for apitherapy. Kim, Christopher M. (USA). Jpn. Kokai Tokkyo Koho JP 2002322071 A2 20021108, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-130722 20010427.

AB The invention relates to a **bee venom injection** compn. for treatment of rheumatoid arthritis, bone arthritis, gout, psoriasis, myalgia, chronic pain, and chronic **inflammation**, etc., wherein the **injection** compn. contains active amts. of **bee venom** and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An **injection** compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

L30 ANSWER 4 OF 27 MEDLINE DUPLICATE 3

2002645460 Document Number: 22259551. PubMed ID: 12372559. Differential effect of peripheral glutamate (NMDA, non-NMDA) receptor antagonists on **bee venom**-induced spontaneous nociception and sensitization. You Hao-Jun; Chen Jun; Morch Carsten Dahl; Arendt-Nielsen Lars. (Center for Sensory-Motor Interaction (SMI), Laboratory for Experimental Pain Research, Aalborg University, Aalborg, Denmark.) BRAIN RESEARCH BULLETIN, (2002 Sep 30) 58 (6) 561-7. Journal code: 7605818. ISSN: 0361-9230. Pub. country: United States. Language: English.

AB This study aimed to investigate the role of peripheral N-methyl-d-aspartate (NMDA) and non-NMDA receptor on (1). spontaneous nociception and (2). on sensitization induced by subcutaneous (s.c.) **injection** of **bee venom** (0.2mg/50 micro l) in rats. Peripheral s.c. administration of the competitive NMDA receptor antagonist dl-2-amino-5-phosphonovaleric acid (AP5), the non-competitive NMDA receptor channel blocker MK-801, and the competitive non-NMDA receptor antagonist 6-cyano-7-nitroquinoxaline-2,3-dione (CNQX) were performed before (pre-treatment) and after (post-treatment) **bee venom**-induced **inflammation**. Pre-treatment with AP5 (10mM, 50 micro l) and both pre-treatment and post-treatment with MK-801 (2mM, 50 micro l) into the same area of the **bee venom**

injection site markedly reduced the **bee venom**-increased spontaneous responses of wide-dynamic range (WDR) neuron of the spinal cord. Post-treatment with the same dose of AP5 as well as pre-treatment and post-treatment with CNQX (5mM, 50 micro l) did not produce any inhibitory effects. Additionally, the role of peripheral NMDA and non-NMDA receptors on **bee venom**-induced mechanical allodynia and hyperalgesia were investigated and assessed by the paw withdrawal reflex to the innocuous and noxious mechanical stimulation. Peripheral administration of AP5, but not CNQX, reduced mechanical allodynia and hyperalgesia. The data suggest that the peripheral NMDA receptor, but not non-NMDA receptor, plays a pivotal role in the **bee venom**-induced persistent nociception and hyperexcitability.

L30 ANSWER 5 OF 27 MEDLINE DUPLICATE 4

2002292104 Document Number: 22028450. PubMed ID: 12031688. The water-soluble fraction of **bee venom** produces antinociceptive and anti-inflammatory effects on rheumatoid arthritis in rats. Kwon Young Bae; Lee Hye Jung; Han Ho Jae; Mar Woung Chon; Kang Sung Keel; Yoon Ok Byung; Beitz Alvin J; Lee Jang Hern. (Department of Veterinary Physiology, College of Veterinary Medicine and School of Agricultural Biotechnology, Seoul National University, Suwon, South Korea.) LIFE SCIENCES, (2002 May 31) 71 (2) 191-204. Journal code: 0375521. ISSN: 0024-3205. Pub. country: England: United Kingdom. Language: English.

AB We recently demonstrated that **bee venom** (BV) **injection** into the Zusanli acupoint produced a significantly more potent anti-inflammatory and antinociceptive effect than **injection** into a non-acupoint in a Freund's adjuvant induced rheumatoid arthritis (RA) model. However, the precise BV constituents responsible for these antinociceptive and/or anti-inflammatory effects are not fully understood. In order to investigate the possible role of the soluble fraction of BV in producing the anti-arthritic actions of BV acupuncture, whole BV was extracted into two fractions according to solubility (a water soluble fraction, BVA and an ethylacetate soluble fraction, BVE) and the BVA fraction was further tested.Subcutaneous BVA **injection** (0.9 mg/kg/day) into the Zusanli acupoint was found to dramatically inhibit paw edema and radiological change (i.e. new bone proliferation and soft tissue swelling) caused by Freund's adjuvant **injection**. BVA treatment also reduced the increase in serum interleukin-6 caused by RA induction to levels observed in non-arthritic animals. In addition, BVA therapy significantly reduced arthritis-induced nociceptive behaviors (i.e. nociceptive scores for mechanical hyperalgesia and thermal hyperalgesia). Finally, BVA treatment significantly suppressed adjuvant-induced Fos expression in the lumbar spinal cord at 3 weeks post-adjuvant **injection**. In contrast, BVE treatment (0.05 mg/kg/day) failed to show any anti-inflammatory or antinociceptive effects on RA.The results of the present study demonstrate that BVA is the effective fraction of whole BV responsible for the antinociception and anti-inflammatory effects of BV acupuncture treatment. Thus it is recommended that this fraction of BV be used for long-term treatment of RA-induced pain and **inflammation**. However, further study is necessary to clarify which constituents of the BVA fraction are directly responsible for these anti-arthritis effects.

L30 ANSWER 6 OF 27 MEDLINE

2002292378 Document Number: 22028832. PubMed ID: 12031781. Heritability of nociception. III. Genetic relationships among commonly used assays of nociception and hypersensitivity. Lariviere William R; Wilson Sonya G; Laughlin Tinna M; Kokayeff Anna; West Erin E; Adhikari Seetal M; Wan You; Mogil Jeffrey S. (Department of Psychology and Neuroscience Program, University of Illinois at Urbana-Champaign, IL 61820, USA.) PAIN, (2002 May) 97 (1-2) 75-86. Journal code: 7508686. ISSN: 0304-3959. Pub. country: Netherlands. Language: English.

AB We and others have previously demonstrated that nociception in the mouse is heritable. A genetic correlation analysis of 12 common measures of nociception among a common set of inbred strains revealed three major clusters (or 'types') of nociception in this species. In the present study, we re-evaluated the major types of nociception and their interrelatedness using ten additional assays of nociception and hypersensitivity, including: three thermal assays (tail withdrawal from 47.5 degrees C water or -15 degrees C ethanol; tail flick from radiant heat), two chemical assays of spontaneous nociception (**bee venom** test; capsaicin test) and their subsequent thermal hypersensitivity states (including contralateral hypersensitivity in the **bee venom** test), a mechanical nociceptive assay (tail-clip test), and a mechanical hypersensitivity assay (intrathecal dynorphin). Confirming our earlier findings, the results demonstrate distinct thermal and chemical nociceptive types. It is now clear that mechanical hypersensitivity and thermal hypersensitivity are genetically dissociable phenomena. Furthermore, we now see at least two distinct types of thermal hypersensitivity: afferent-dependent, featuring a preceding significant period of spontaneous nociceptive behavior associated with afferent neural activity, and non-afferent-dependent. In conclusion, our latest analysis suggests that there are at least five fundamental types of nociception and hypersensitivity: (1) baseline thermal nociception; (2) spontaneous responses to noxious chemical stimuli; (3) thermal hypersensitivity; (4) mechanical hypersensitivity; and (5) afferent input-dependent hypersensitivity.

L30 ANSWER 7 OF 27 MEDLINE DUPLICATE 5
2002324315 Document Number: 22061840. PubMed ID: 12067099. The effect of whole **bee venom** on arthritis. Kang Seong Soo; Pak Sok Cheon; Choi Seok Hwa. (College of Veterinary Medicine and Research Institute of Veterinary Medicine, Chungbuk National University, Cheongju, Korea.) AMERICAN JOURNAL OF CHINESE MEDICINE, (2002) 30 (1) 73-80. Journal code: 7901431. ISSN: 0192-415X. Pub. country: United States. Language: English.

AB This study was performed to assess the clincotherapeutic effect of whole venom of honeybee (Apis mellifera) in adjuvant-induced arthritic rat. Ninety Sprague-Dawley male rats were injected with complete Freund's adjuvant (CFA). Adjuvant arthritis was produced by a single subcutaneous **injection** of I mg Mycobacterium butyricum suspended in 0.1 ml paraffin oil into the right hind paw. Righting reflex was uniformly lost and considered to be the point of arthritis development on day 14 after CFA **injection**. The experiments were divided into three groups. When arthritis was developed in the rat, tested groups were administered with prednisolone (10 mg/kg, p.o.) or honeybee venom (one bee, s.c.) every other day for another 14 days. Control group was injected with 0.1 ml of physiological saline solution subcutaneously. Clinical and hematological values with histopathological findings were observed during the drug administration. In treatment groups, the development of inflammatory edema and polyarthritis was suppressed. No significant differences of hind paw edema volume and lameness score between prednisolone and honeybee venom groups were observed during treatment. White blood cell counts of control group showed leucocytosis that was significantly different from the two treatment groups ($p < 0.01$). Erosions of articular cartilage and inflammatory cell infiltrations into interphalangeal joint were effectively suppressed in treated groups. In conclusion, whole honeybee venom was found to suppress arthritic **inflammation** in the rat. This may be an alternative treatment of arthritic agony in humans.

L30 ANSWER 8 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 6
2001072199 EMBASE **Bee venom injection** into an acupuncture point reduces arthritis associated edema and nociceptive responses. Kwon Y.-B.; Lee J.-D.; Lee H.-J.; Han H.-J.; Mar W.-C.; Kang S.-K.; Beitz A.J.; Lee J.-H.. J.-H. Lee, Department of Veterinary

Physiology, Coll. Vet. Med./Sch. Agric. Biotech., Seoul National University, Suwon 441-744, Korea, Republic of. JHL1101@snu.ac.kr. Pain 90/3 (271-280) 15 Feb 2001.
Refs: 39.
ISSN: 0304-3959. CODEN: PAINDB.
Publisher Ident.: S 0304-3959(00)00412-7. Pub. Country: Netherlands.
Language: English. Summary Language: English.

AB **Bee venom** (BV) has traditionally been used in Oriental medicine to relieve pain and to treat inflammatory diseases such as rheumatoid arthritis (RA). While several investigators have evaluated the anti-inflammatory effect of BV treatment, the anti-nociceptive effect of BV treatment on inflammatory pain has not been examined. Previous studies in experimental animals suggest that the therapeutic effect of BV on arthritis is dependent on the site of administration. Because of this potential site specificity, the present study was designed to evaluate the anti-nociceptive effect of BV **injections** into a specific acupoint (Zusanli) compared to a non-acupoint in an animal model of chronic arthritis. Subcutaneous BV treatment (1 mg/kg per day) was found to dramatically inhibit paw edema caused by Freund's adjuvant **injection**. Furthermore, BV therapy significantly reduced arthritis-induced nociceptive behaviors (i.e. the nociceptive scores for mechanical hyperalgesia and thermal hyperalgesia). These anti-nociceptive/anti-inflammatory effects of BV were observed from 12 days through 21 days post-BV treatment. In addition, BV treatment significantly suppressed adjuvant-induced Fos expression in the lumbar spinal cord at 3 weeks post-adjuvant **injection**. Finally, **injection** of BV into the Zusanli acupoint resulted in a significantly greater analgesic effect on arthritic pain as compared to BV **injection** in to a more distant non-acupoint. The present study demonstrates that BV **injection** into the Zusanli acupoint has both anti-inflammatory and anti-nociceptive effects on Freund's adjuvant-induced arthritis in rats. These findings raise the possibility that BV acupuncture may be a promising alternative medicine therapy for the long-term treatment of rheumatoid arthritis. .COPYRGT. 2001 International Association for the Study of Pain.

L30 ANSWER 9 OF 27 MEDLINE DUPLICATE 7
2001494227 Document Number: 21202124. PubMed ID: 11307924. **Bee venom** pretreatment has both an antinociceptive and anti-inflammatory effect on carrageenan-induced **inflammation**.
Lee J H; Kwon Y B; Han H J; Mar W C; Lee H J; Yang I S; Beitz A J; Kang S K. (Department of Veterinary Physiology, College of Veterinary Medicine, Seoul National University, Suwon, South Korea.) JOURNAL OF VETERINARY MEDICAL SCIENCE, (2001 Mar) 63 (3) 251-9. Journal code: 9105360. ISSN: 0916-7250. Pub. country: Japan. Language: English.

AB Although the **injection** of **bee venom** (BV) has been reported to evoke tonic pain and hyperalgesia, there is conflicting evidence in the literature indicating that BV can also exert an anti-inflammatory and antinociceptive effects on **inflammation**. In this regard, BV has been traditionally used in Oriental medicine to relieve pain and to treat chronic inflammatory diseases such as rheumatoid arthritis. The present study was designed to test the hypothesis that BV induces acute nociception under normal conditions, but that it can serve as a potent anti-inflammatory and antinociceptive agent in a localized inflammatory state. The experiments were designed to evaluate the effect of BV pretreatment on carrageenan (CR)-induced acute paw edema and thermal hyperalgesia. In addition, spinal cord Fos expression induced by peripheral **inflammation** was quantitatively analyzed. In normal animals subcutaneous BV **injection** into the hindlimb was found to slightly increase Fos expression in the spinal cord without producing detectable nociceptive behaviors or hyperalgesia. In contrast pretreatment with BV (0.8 mg/kg) 30 min prior to CR **injection** suppressed both the paw edema and thermal hyperalgesia evoked by CR. In

addition, there was a positive correlation between the percent change in paw volume and the expression of Fos positive neurons in the spinal cord. These results indicate that BV pretreatment has both antinociceptive and anti-inflammatory effects in CR-induced inflammatory pain. These data also suggest that BV administration may be useful in the treatment of the pain and edema associated with chronic inflammatory diseases.

L30 ANSWER 10 OF 27 SCISEARCH COPYRIGHT 2003 THOMSON ISI
2001:177494 The Genuine Article (R) Number: 403WD. Secondary heat, but not mechanical, hyperalgesia induced by subcutaneous **injection** of **bee venom** in the conscious rat: effect of systemic MK-801, a non-competitive NMDA receptor antagonist. Chen H S; Chen J (Reprint). Fourth Mil Med Univ, Dept Anat, 17 W Chang Le Rd, Xian 710032, Peoples R China (Reprint); Fourth Mil Med Univ, Dept Anat, Xian 710032, Peoples R China; Fourth Mil Med Univ, KK Leung Brain Res Ctr, Xian 710032, Peoples R China. EUROPEAN JOURNAL OF PAIN-LONDON (FEB 2000) Vol. 4, No. 4, pp. 389-401. Publisher: W B SAUNDERS CO LTD. 24-28 OVAL RD, LONDON NW1 7DX, ENGLAND. ISSN: 1090-3801. Pub. country: Peoples R China. Language: English.
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB Subcutaneous (s.c.) administration of **bee venom** into the plantar surface of one hind paw in rats has been found to produce an immediate single phase of persistent spontaneous nociceptive responses (continuously: flinching, licking or lifting the injected paw) for 1-2 h accompanied by a 72-96 hour period of primary heat and mechanical hyperalgesia in the **injection** site and a spread of heat, but not mechanical, hyperalgesia in the non-injected hind paw (Chen et al., 1999b). To gain insight into the underlying mechanisms of the **bee venom**-induced hyperalgesia in particular, we further identified a heat, but not mechanical, hyperalgesia in an area (paw; pad) distant from the **injection** site induced by s.c. **injection** of **bee venom** into the posterior leg 0.8-1.2 cm proximal to the heel measured by paw withdrawal reflex to radiant heat or von Frey monofilament stimuli in conscious rats. In the **bee venom** -treated hind limb, however, significant reduction in both thermal latency and mechanical threshold of withdrawal reflex was identified for a period of more than 96 h in the heel with a similar characteristic to the primary heat and mechanical hyperalgesia identified in the **injection** site previously. The time course of the heat hyperalgesia identified in the paw pad of the **bee venom**-treated side was shorter and lasted for less than 48 h, which ct as in parallel with the reduction in thermal latency of the withdrawal reflex identified in the non-injected hind paw Moreover pre- or post-treatment with a single dose of MK-801 (0.01 mg/kg, i.p.), a non-competitive N-methyl-D-aspartate (NMDA) receptor antagonist. completely blocked the occurrence, and reversed the established process of the heat hyperalgesia identified in either the **bee venom**-treated or non-treated paw pads, while the same treatments with the drug did not produce any influence upon the development and maintaining of the heat and mechanical hyperalgesia identified in the heel of the injected hind limb. Taken together with our previous results following s.c. intraplantar **bee venom** **injection**, we conclude that: (I)in addition to the well-identified primary heat and mechanical hyperalgesia in the **injection** site and its adjacent ar ea. s.c. **bee venom** is also able to produce a secondary heat hyperalgesia in a region distant from the **injection** sire which has a similar characteristic to the contralateral heat hyperalgesia; (2) NMDA receptors are involved in either development or maintenance of the secondary and the contralateral heat hyperalgesia, but without any role in those processes of the primary heat and mechanical hyperalgesia: (3) the secondary heat hyperalgesia seen in the injected hind limb is likely to share the same neural mechanisms with that identified in the noninjected side via co-activation of NMDA receptors. (C) 2000 European Federation of Chapters of the International

Association for the Study of Pain.

L30 ANSWER 11 OF 27 MEDLINE
2000106590 Document Number: 20106590. PubMed ID: 10643796. Modulatory roles of the adenosine triphosphate P2x-purinoceptor in generation of the persistent nociception induced by subcutaneous **bee venom injection** in the conscious rat. Zheng J H; Chen J. (Department of Anatomy and K.K. Leung Brain Research Centre, The Fourth Military Medical University, Xi'an, People's Republic of China.) NEUROSCIENCE LETTERS, (2000 Jan 7) 278 (1-2) 41-4. Journal code: 7600130. ISSN: 0304-3940. Pub. country: Ireland. Language: English.

AB To study the role of adenosine triphosphate (ATP) P2x-purinoceptor in the persistent nociceptive response induced by subcutaneous (s.c.) **bee venom injection**, we used a selective P2x receptor antagonist, pyridoxal-phosphate-6-azophenyl-2',4'-disulfonic acid (PPADS), to evaluate whether spinal P2x receptor play a role in development of spontaneous persistent pain. **Injection** s.c. of **bee venom** into the plantar surface of one hindpaw in the conscious rat produces a monophasic, prolonged persistent nociception characterized by continuously flinching reflex of the injected paw for 1-2 h. Intrathecal (i.t.) pretreatment with PPADS at two lower doses of 5 and 10 microg resulted in suppression of the flinching reflex in a dose dependent manner with the inhibitory rate 37 and 44%, respectively, when compared with the control group; whereas i.t. PPADS at a higher dose of 30 microg failed to produce any inhibitory effect. This result suggests that activation of P2x-purinoceptor in the spinal cord contributes to the induction of **bee venom**-induced prolonged persistent pain. However, the antinociceptive effect of ATP P2x-purinoceptor antagonist such as PPADS on clinical pathological pain seems to be limited due to its lack of effectiveness at higher dose.

L30 ANSWER 12 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
1999207166 EMBASE A novel venom protein of the Asian bee (Apis cerana indica) with an affinity to human .alpha.1-microglobulin. Natzir R.; Teranishi H.; Kitagawa M.; Kasuya M.. H. Teranishi, Department of Public Health, Faculty of Medicine, Toyama Medical/Pharmaceutical Univ., 2630 Sugitani, Toyama 930-0194, Japan. hiterani@ms.toyama-mpu.ac.jp. Allergology International 48/2 (121-128) 19 Apr 1999.
Refs: 28.
ISSN: 1323-8930. CODEN: ALINFR. Pub. Country: Australia. Language: English. Summary Language: English.

AB Bee stings are a common health problem throughout the world and can sometimes result in fatal anaphylactic reactions. We have studied Asian bee (Apis cerana indica, Apis cerana nigrocincta and Apis dorsata) venoms and have discovered a novel protein with a molecular size of 50 kDa (p50), as shown by sodium dodecyl sulfate-polyacrylamide gel electrophoresis, which has not been reported in the venom of the Western honey-bee, Apis mellifera (AM). The p50 protein showed a unique affinity to human .alpha.1-microglobulin (.alpha.1- m). As a result, p50 was purified using an affinity column with .alpha.1-m. The p50 protein was further purified by an affinity column with a monoclonal antibody raised against p50 in mice. The p50 protein induced an inflammatory reaction following **injection** into mouse ear; that is, degranulation of mast cells, edema, hyperemia and hyperpermeation of the local capillaries were observed. The reaction was very similar to that seen when phospholipase A2 of AM, a representative **bee venom**, was administered by **injection**. The inflammatory reaction induced by p50 was completely inhibited by mixing p50 with .alpha.1-m prior to **injection**. These results indicate that p50 is a unique venom component of the Asian bee that induces the inflammatory reaction and that human .alpha.1-m may be involved as a protective mechanism against bee stings of at least some Asian bee species.

L30 ANSWER 13 OF 27 MEDLINE DUPLICATE 8
1999438220 Document Number: 99438220. PubMed ID: 10506673. Primary hyperalgesia to mechanical and heat stimuli following subcutaneous **bee venom injection** into the plantar surface of hindpaw in the conscious rat: a comparative study with the formalin test. Chen J; Luo C; Li H; Chen H. (Department of Anatomy and K.K. Leung Brain Research Centre, The Fourth Military Medical University, Xi'an, People's Republic of China.. deptanat@mail.fmmu.edu.cn) . PAIN, (1999 Oct) 83 (1) 67-76. Journal code: 7508686. ISSN: 0304-3959. Pub. country: Netherlands. Language: English.

AB To elucidate the underlying mechanisms of pathological pain, it is important and necessary to develop an animal model characterized by both spontaneous tonic pain and hyperalgesia with a prolonged duration post-tissue injury. In this report, we investigated whether the two animal models of spontaneous tonic pain (the formalin test and the **bee venom** test) could develop a hyperalgesia to mechanical and thermal stimuli in the injured area following subcutaneous (s.c.) administration of the two chemical agents into the plantar surface of one hindpaw in the conscious rats. It was found that the persistent nociceptive response (flinching and lifting/licking the injected hindpaw) was monophasic and lasted for 1-2 h followed by a 72-96 h period of reduction in mechanical threshold and heat latency of withdrawal reflex in the **bee venom injection** area; however, in contrast, the spontaneous pain-related response was biphasic followed by a permanent hypoalgesia or analgesia in the formalin **injection** area although the duration and response intensity of spontaneous pain was comparable with those following **bee venom** treatment. Subcutaneous. **bee venom injection** also produced a distinct reduction of heat latency on the contralateral hindpaw, while s.c. formalin did not. On the other hand, s.c. **bee venom injection** produced a striking edema and redness of the plantar surface for nearly the same period as the development of hyperalgesia, while the edema and redness could not be obviously observed after the formalin treatment. In the control study, repetitive suprathreshold mechanical or heat stimuli applied to the plantar surface with or without saline treatment did not significantly influence the mechanical threshold or heat latency, suggesting that the phenomena of mechanical and heat hyperalgesia were not the effects of vehicle treatment or those of the stimulus modalities themselves. Taken together, our present results showed that in contrast to s.c. formalin **injection** , subcutaneous. **bee venom injection** produced little tissue damage but a striking **inflammation** accompanied by a prolonged spontaneous pain and a pronounced primary hyperalgesia to mechanical and heat stimuli in the treated hindpaw and a heat, but not mechanical, hyperalgesia in the contralateral hindpaw, implicating that **bee venom** model may have more advantages over the formalin test and probably other chemoirritants to study the neural mechanisms underlying pathological pain and, especially, the relationship between spontaneous pain and development of hyperalgesia.

L30 ANSWER 14 OF 27 MEDLINE DUPLICATE 9
97035194 Document Number: 97035194. PubMed ID: 8880850. The **bee venom** test: a new tonic-pain test. Lariviere W R; Melzack R. (Department of Psychology, McGill University, Montreal, Quebec, Canada.) PAIN, (1996 Aug) 66 (2-3) 271-7. Journal code: 7508686. ISSN: 0304-3959. Pub. country: Netherlands. Language: English.

AB The present study describes a new test of tonic pain to be used as an animal model of persistent pain. First, pain responses and edema produced by subcutaneous **injection** of increasing doses of honey **bee venom** into the hind paw of the rat were quantified. Second, the effect of morphine and aspirin on the pain responses was investigated. Finally, the response to concurrent **injections** of **bee venom** and formalin was examined. Subcutaneous

injection of **bee venom** produced local **inflammation**, tonic-pain responses lasting from 10 min to more than 1 h, and marked edema lasting from 3 h to more than 48 h. Increasing doses of **bee venom** produced higher mean pain scores and increased durations of responding. The time course of the edema did not follow the time course of the pain responses. Analgesia was produced by morphine and aspirin, indicating that the **bee venom** test can be used to test analgesic drugs. Concurrent administration of **bee venom** and formalin produced pain responses similar to formalin alone, with a less profound interphase depression and a longer duration. The data suggest that the **bee venom** test is a valid animal model of experimental tonic pain.

L30 ANSWER 15 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
95116997 EMBASE Document No.: 1995116997. Phospholipase A2-activating protein induces the synthesis of IL-1 and TNF in human monocytes. Bomalaski J.S.; Ford T.; Hudson A.P.; Clark M.A.. Rheumatology Division, Department of Medicine, Medical College of Pennsylvania,Philadelphia, PA 19129, United States. Journal of Immunology 154/8 (4027-4031) 1995. ISSN: 0022-1767. CODEN: JOIMA3. Pub. Country: United States. Language: English. Summary Language: English.

AB Phospholipase A2-activating protein (PLAP) is an important mediator of eicosanoid generation. PLAP can also be found in high concentrations in synovial fluid from patients with rheumatoid arthritis, and **injection** of PLAP into animal joints results in an inflammatory, rheumatoid-like lesion. We have demonstrated previously that TNF-.alpha. and IL-1.beta. stimulate formation of PLAP before phospholipase A2 (PLA2) enzyme activation and production of eicosanoids. To further explore the mechanisms found in the inflammatory response, we examined the ability of PLAP to stimulate release of TNF and IL- 1 from human peripheral blood monocytes. TNF and IL-1 protein levels were measured by ELISA, and IL-1 and TNF mRNA were determined by Northern blotting. PLAP, PLAP peptide, and melittin, a **bee venom** PLA2 activator with homology with PLAP, all increased IL-1 and TNF production in a time- and dose-dependent manner. Heat-denatured PLAP and actin (an irrelevant protein) failed to exert this effect. PLAP stimulation of TNF and IL-1 could be enhanced with co-treatment of cells with free fatty acids, such as arachidonic or linoleic acid, but it was not blocked completely by PLA2 inhibitors. These results demonstrate not only that synthesis of PLAP can be stimulated by cytokines, but also that PLAP may regulate cytokine synthesis and thus perpetuate an immune or inflammatory response.

L30 ANSWER 16 OF 27 SCISEARCH COPYRIGHT 2003 THOMSON ISIDUPLICATE 10
95:439403 The Genuine Article (R) Number: RE213. EFFECT OF THIELOCIN A1-BETA ON **BEE VENOM** PHOSPHOLIPASE A(2)-INDUCED EDEMA IN MOUSE PAW. TANAKA K (Reprint); MATSUTANI S; MATSUMOTO K; YOSHIDA T. SHIONOGI & CO LTD, SHIONOGI RES LABS, FUKUSHIMA KU, 12-4 SAGISU 5 CHOME, OSAKA 553, JAPAN (Reprint). EUROPEAN JOURNAL OF PHARMACOLOGY (12 JUN 1995) Vol. 279, No. 2-3, pp. 143-148. ISSN: 0014-2999. Pub. country: JAPAN. Language: ENGLISH.
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Several investigators have reported that inactivation of secretory phospholipase A(2) purified from **bee venom** with p-bromophenacyl bromide, an irreversible inhibitor, before **injection** resulted in attenuation of the subsequent inflammatory reaction in the mouse paw edema model. Recently, thielocin A1 beta, a novel secretory phospholipase A(2) inhibitor from fungi, was found to suppress histamine release from mast cells stimulated with secretory phospholipase A(2). These observations led us to examine the effect of thielocin A1 beta against secretory phospholipase A(2)-induced paw edema. Thielocin A1 beta inhibited **bee venom** phospholipase A(2) in a dose-dependent manner (IC50 = 1.4 mu M) In addition, the inhibition of **bee venom** phospholipase A(2) was

noncompetitive (K-i = 0.57 mu M) and reversible. Subplantar **injection** of **bee venom** phospholipase A(2) produced a rapid but transient edematous response. Coinjection of thielocin A1 beta (1 mu g/paw) with **bee venom** phospholipase A(2) resulted in a 44.7 +/- 4.6% reduction of edema formation. This anti-edema action was not enhanced by cyproheptadine (antihistamine/antiserotonin). These results suggest that thielocin A1 beta shows edema-reducing activity via inhibition of the phospholipase A(2) activity which participates in histamine release by mast cells.

L30 ANSWER 17 OF 27 MEDLINE DUPLICATE 11

91372272 Document Number: 91372272. PubMed ID: 1716576. Anti-inflammatory effect of gangliosides in the rat hindpaw edema test. Correa S G; Bianco I D; Riera C M; Fidelio G D. (Departamento de Bioquimica Clinica, CIOUIBIC, Facultad de Ciencias Quimicas, Cordoba, Argentina.) EUROPEAN JOURNAL OF PHARMACOLOGY, (1991 Jun 18) 199 (1) 93-8. Journal code: 1254354. ISSN: 0014-2999. Pub. country: Netherlands. Language: English.

AB The influence of total brain gangliosides on acute **inflammation** was investigated using the rat hind paw edema test. Total gangliosides (10 micrograms/paw) inhibited the edema produced by the **injection** of **bee venom** phospholipase A2 (5 micrograms/paw) when the lipids were co-injected or injected 15 min before the phospholipase A2. Sulphatide (10 micrograms/paw) did not inhibit the edema but potentiated it. Gangliosides (40 micrograms/paw) inhibited the edema induced by carrageenin 1% when they were injected 1 h before the agent. However, gangliosides (up to 200 micrograms/paw) failed to inhibit the dextran-induced edema. The edema test was also used to investigate the effect of gangliosides on the production of mediators of **inflammation** by peritoneal adherent macrophages. Gangliosides inhibited the production of mediators of **inflammation** only when they were incubated with these cells before the stimulation with phospholipase A2 or carrageenin. Gangliosides did not inhibit the production of mediators of **inflammation** when arachidonic acid was added to the cells. These results suggest that the anti-inflammatory effect observed with gangliosides is mediated by inhibition at or before endogenous phospholipase activity.

L30 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2003 ACS

1990:111725 Document No. 112:111725 Anti-inflammatory activity of **bee venom** peptide 401 (mast cell degranulating peptide) and compound 48/80 results from mast cell degranulation in vivo. Banks, Barbara E. C.; Dempsey, Christopher E.; Vernon, Charles A.; Warner, Jane A.; Yamey, Jill (Dep. Physiol., Univ. Coll., London, WC1E 6BT, UK). British Journal of Pharmacology, 99(2), 350-4 (English) 1990. CODEN: BJPCBM. ISSN: 0007-1188.

AB The relationship between the anti-inflammatory activity of the **bee venom** peptide 401 in the carrageenin-induced edema of the rat hind paw and its mast cell degranulating activity was investigated. Mast cell degranulation caused by compd. 48/80 (10 mg/kg) or by allergen challenge in rats sensitized to Nippostrongylus brasiliensis also suppressed the edema. The anti-inflammatory activities of peptide 401 and compd. 48/80 were partially suppressed by pretreatment with mepyramine and methysergide (2.5 mg/kg) that completely suppressed skin reactions to these mast cell-derived amines. Pretreatment of rats with compd. 48/80 also suppressed the apparent anti-inflammatory actions of peptide 401 and of compd. 48/80. **Injection** of peptide 401 together with carrageenin increased the inflammatory response in the rat hind paw. The anti-inflammatory activity of peptide 401 and of compd. 48/80 in the carrageenin-induced swelling of the rat hind paw arises from mast cell degranulation in vivo.

L30 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2003 ACS

1987:95798 Document No. 106:95798 **Bee venom** adolapin:

effect on thromboxane A2 and prostacyclin plasma levels in rats with model acute **inflammation**. Shkenderov, S.; Koburova, K.; Chavdarova, V. (State Inst. Control Drugs, Sofia, 1000, Bulg.). Doklady Bolgarskoi Akademii Nauk, 39(9), 155-7 (English) 1986. CODEN: DBANAD. ISSN: 0366-8681.

AB In rats, adolapin (a basic polypeptide from **bee venom**) [79029-92-8] (20 .mu.g/kg, s.c.) did not affect the normal blood plasma levels of prostacyclin [35121-78-9] and thromboxane A3 [60114-68-3], but did antagonize the increases in the formation of these compds. in the blood plasma induced by induction of **inflammation** by **injection** of carrageenin into the right hind foot pad. Adolapin also inhibited cyclooxygenase [39391-18-9] in vitro, but its max. effect was 60-80%. Thus, adolapin may have therapeutic effects without causing disturbances of the physiol. balance of the prostaglandin-forming system.

L30 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2003 ACS

1987:95797 Document No. 106:95797 Anti-inflammatory effect of **bee venom** protease inhibitor on a model system of acute **inflammation** edema. Shkenderov, S. (State Inst. Control Drugs, Sofia, Bulg.). Doklady Bolgarskoi Akademii Nauk, 39(9), 151-4 (English) 1986. CODEN: DBANAD. ISSN: 0366-8681.

AB In rats, aprotinin (a **bee venom** protease inhibitor) [9087-70-1] inhibited the model paw **inflammation** caused by carrageenin, PGE1, bradykinin, and histamine. Aprotinin weakly inhibited edema due to serotonin, dextran, and formalin and moderately inhibited the granuloma from cotton balls. Aprotinin also inhibited the inflammatory reactions due to foot pad **injections** of liver and polymorphonuclear leukocyte lysosomes. The role of aprotinin as a biol. active component of **bee venom** and its potential anti-inflammatory activity are discussed.

L30 ANSWER 21 OF 27 MEDLINE DUPLICATE 12

84303624 Document Number: 84303624. PubMed ID: 6475661. Inhibitory effect of honey **bee venom** on immune complex mediated leukocyte migration into rabbit knee-joints. Thomsen P; Bjursten L M; Ahlstedt S; Bagge U; Bjorksten B. AGENTS AND ACTIONS, (1984 Jun) 14 (5-6) 662-6. Journal code: 0213341. ISSN: 0065-4299. Pub. country: Switzerland. Language: English.

AB The anti-inflammatory effect of purified honey **bee venom** (HBV) was studied using a recently described animal model in which preformed immune complexes were injected into rabbit knee-joints. As little as a single **injection** of 1.2 micrograms HBV/kg body weight subcutaneously significantly reduced the immune complex induced joint **inflammation** as measured by reduction in leukocyte counts in the joint fluid. This decrease was obvious 3 and 6 but not 9 hours after induction of the **inflammation**. There was no significant effect on leukocyte random migration, chemotactic responsiveness or phagocytosis, indicating that HBV did not interfere with normal phagocyte motility and ingestion. The modifying effects by HBV on the inflammatory response to immune complexes in vivo is most likely due to interference with other components of the inflammatory response.

L30 ANSWER 22 OF 27 MEDLINE

77138467 Document Number: 77138467. PubMed ID: 849774. [Action of chlorphentermine on the hydrolysis of phosphatidyl choline by phospholipase A2 (author's transl)]. Die Wirkung von Chlorphentermin auf die Phosphatidylcholin-Hydrolyse durch Phospholipase A2. Grabner R. EXPERIMENTELLE PATHOLOGIE, (1977) 13 (1) 68-77. Journal code: 0113124. ISSN: 0014-4908. Pub. country: GERMANY, EAST: German Democratic Republic. Language: German.

AB Question: The anorectic drug chlorphentermine (Chlph) has been reported to cause lipoidosis-like cellular alterations in many organs, especially in lungs. A weak **inflammation** has been observed during the first

week of daily application. After that time a pronounced foam cell production with many lamellated inclusion bodies in the cell occurs. It has been supposed that this action is caused by an inhibition of phospholipid-degradation due to an association between the drug and phospholipids. To substantiate this mechanism an in vitro study a bout the action of Chlph on the hydrolysis of phosphytidyl choline (PC) by phospholipase A2 (**bee venom**) was undertaken. Material and methods: Pur PC was obtained by column chromatography of egg lecithin. PC was used in two physical states. Handshaken liposomes are used as a model of the lamellated inclusion bodies of drug- induced phospholipidosis. The kinetic analysis was carried out on single bilayered liposomes obtained by **injection** of an ethanolic PC-solution into 0.16 M KCl. Purified **bee venom** was used as enzyme source. Usually the drug was added before the initiation of the enzyme reaction. In some cases Chlph was added after starting the hydrolysis by phospholipase for a detailed characterization of the type of interaction between Chlph and PC. The velocity of the enzyme reaction was measured by pH- stat titration and was expressed as mM H+-release per min. Results: Two phases of Chlph-action are observed. A time limited stimulation of hydrolysis occurs immediatly after addition of the drug. The enzyme reaction is inhibited after the disappearence of this activation. This inhibition is independent of the physical state of the substrate and is very pronounced at equimolar mixtures of Chlph and PC (88 per cent inhibition in handshaken liposomes; 78 per cent inhibition in single bilayered liposomes). At inhibitor concentrations below 10 mol per cent the hydrolysis is not affected. By kinetic analysis it was found that the inhibitory action is due to an association between the inhibitor and the substrate. The Lineweaver-Burk- and Dixon-replots show a series of curves characteristic for this type of interaction (concave shape; no common intersections, situated in the 2nd quadrant). The intermediate stimulation of the substrate hydrolysis occurs only during the reaction of Chlph with PC. This is concluded from the following observations: The duration of activation is proportional to the inhibitor concentration as well as to the substrate concentration, i.e. it is proportional to the concentration of both reactants. The activation does not occur if the enzyme reaction is started some time after mixing inhibitor and substrate, i.e. after finishing the reaction. The results are discussed in relation to the in vivo action of Chlph.

L30 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2003 ACS

1974:499442 Document No. 81:99442 Antiinflammatory property of 401 (MCD-peptide), a peptide from the venom of the bee Apis mellifera. Hanson, Jennifer M.; Morley, J.; Soria-Herrera, C. (Div. Immunol., Kennedy Inst. Rheumatol., London, UK). British Journal of Pharmacology, 50(3), 383-92 (English) 1974. CODEN: BJPCBM. ISSN: 0007-1188.

AB Peptide 401 (I) [32908-73-9] (1 mg/kg, s.c.) from **bee venom** inhibited the edema provoked by subplantar **injection** of carrageenan or intraarticular **injection** of turpentine in the rat, and also suppressed the increased vascular permeability due to intradermal **injection** of smooth muscle spasmogens. I probably exerts its antiinflammatory effect by rendering the vascular endothelium anergic to phlogistic stimuli. Pretreatment with mepyramine maleate [59-33-6] or methysergide bimaleate [129-49-7] abolished the increased vascular permeability but not the antiinflammatory effects produced by I. The latter were also unaffected by regional denervation or pretreatment with phenoxybenzamine-HCl, but were reduced by adrenalectomy.

L30 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2003 ACS

1973:322 Document No. 78:322 Influence of **bee venom** in the adjuvant-induced arthritic rat model. Lorenzetti, O. J.; Fortenberry, B.; Busby, E. (Alcon Lab., Inc., Fort Worth, TX, USA). Research Communications in Chemical Pathology and Pharmacology, 4(2), 339-52 (English) 1972. CODEN: RCOCB8. ISSN: 0034-5164.

AB Bee (Apis melliflera) venom, administered s.c. at 4 mg/kg, 3 times a week, beginning 2 weeks before or 1 week after plantar **injection** of a Mycobacterium butyricum suspension into rats, decreased foot edema, secondary lesions, and **inflammation**. The antiinflammatory effect was more pronounced with the prophylactic treatment.

L30 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2003 ACS
1973:92927 Document No. 78:92927 Effect of prostaglandins on enzyme release from lysosomes and experimental arthritis. Zurier, R. B.; Weissmann, G. (Sch. Med., New York Univ., New York, NY, USA). Prostaglandins Cell. Biol., Proc. ALZA Conf., Meeting Date 1971, 151-72. Editor(s): Ramwell, Peter W. Plenum: New York, N. Y. (English) 1972. CODEN: 26GNA7.
AB Incubation of human leukocytes with PGE1 [745-65-3] and PGA2 [13345-50-1] prior to exposure to zymosan or immune complexes reduced lysosomal enzyme release. PGF2.alpha. [551-11-1] caused increased cytoplasmic enzyme release and cell death, while other prostaglandins examd. did not affect enzyme release. Adjuvant arthritis in adult rats was suppressed by PGE1 (500 .mu.g, s.c., twice daily, for days 14-20 after adjuvant **injection**) and **bee venom** (4 mg/kg, s.c.), a phospholipase A-contg. venom which releases prostaglandins from tssues. Some prostaglandins may be useful agents in controlling the inflammatory response.

L30 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2003 ACS
1970:65233 Document No. 72:65233 Pharmacological studies on Mellivenon. Petkov, Veselin; Ovcharov, R. (Bulg.). Suvremenna Meditsina, 20(5), 232-5 (Bulgarian) 1969. CODEN: SUMEA4. ISSN: 0562-7192.
AB Toxicity and some pharmacol. properties of the **bee venom** prepn. Mellivenon (I) were studied. The LD50 values for mice (in mg/kg) were 4.69 (i.p.) and 7.80 (s.c.). Chronic administration of I for 6 months in daily doses of 500 .mu.g/kg caused leukocytosis and superficial skin necrosis with no other abnormal findings. In rats, I (100 .mu.g/kg, s.c.) given for 3-4 days prior to the **injection** of 0.1 ml 10% dextran contg. 0.1% histamine and 0.5% serotonin suppressed the formation of edema and accelerated its resorption. I at 100 .mu.g/ml caused contractions of the uterine horn of the guinea pig, the effect being inhibited by promethazine (100 .mu.g/ml). I in doses of 100 and 500 .mu.g/kg resulted in the lowering of blood pressure in cats by 30% and 60% for 10 and 15 min, resp. This effect was also inhibited by promethazine. The permeability of s.c. blood vessels for colloid 198Au was investigated in rabbits. Following intradermal **injection** of I (12.5-100 .mu.g/kg) the permeability increased 2-8-fold; in higher doses (>100 .mu.g/kg) it dropped below the level of the controls. The 24-hr urinary excretion of 17-keto steroids by rats, following the administration of I (10 or 100 .mu.g/kg) for 3 days, increased from 0.072 to 0.121 and from 0.081 to 0.158 mg, resp.

L30 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2003 ACS
1960:57888 Document No. 54:57888 Original Reference No. 54:11281a-c Effect of anticoagulants on inflammatory tissue reactions. Jancso, N.; Jancso-Gabor, A. Arch. exptl. Pathol. Pharmakol., 238, 83-4 (Unavailable) 1960.
AB Prophylactic **injection** of La, Ce, Pr, and Nd salts, didymium .beta.-acetylpropionate, liquoid, and Ge inhibited markedly the edematous **inflammations** of the rat's hind paw. The anticoagulants suppressed the edema produced with serotonin, peptone, dextran, or kallikrein, and the **inflammations** caused by **bee venom** and that of various snakes. To test whether the **inflammation** is related to local coagulation, coagulants (thrombin, papain, thromobokinase, staphylocoagulase, ninhydrin, and Na 1,2-naphthoquinone-4-sulfonate) were injected into rats and caused severe edema formation which was inhibited by the anticoagulants. The process of coagulation could be made visible by intravenous **injection** of

colloidal Ag. The deposit consisted then of fibrin and Ag. Intravenous administration of fibrinogen caused addnl. Ag deposits. The rare metals and liquoid abolished the colloid fixation.

=> s l13 and migraine
L31 1 L13 AND MIGRAINE

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L31 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
2002:847709 Document No. 137:342129 **Bee venom** compositions for apitherapy. Kim, Christopher M. (USA). Jpn. Kokai Tokkyo Koho JP 2002322071 A2 20021108, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-130722 20010427.
AB The invention relates to a **bee venom injection** compn. for treatment of rheumatoid arthritis, bone arthritis, gout, psoriasis, myalgia, chronic pain, and chronic inflammation, etc., wherein the **injection** compn. contains active amts. of **bee venom** and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An **injection** compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

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L32 1 L13 AND PSORIASIS

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L32 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
2002:847709 Document No. 137:342129 **Bee venom** compositions for apitherapy. Kim, Christopher M. (USA). Jpn. Kokai Tokkyo Koho JP 2002322071 A2 20021108, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-130722 20010427.
AB The invention relates to a **bee venom injection** compn. for treatment of rheumatoid arthritis, bone arthritis, gout, **psoriasis**, myalgia, chronic pain, and chronic inflammation, etc., wherein the **injection** compn. contains active amts. of **bee venom** and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An **injection** compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

=> s l13 and multiple sclerosis
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L34 5 DUP REMOVE L33 (1 DUPLICATE REMOVED)

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L34 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS
2002:847709 Document No. 137:342129 **Bee venom** compositions for apitherapy. Kim, Christopher M. (USA). Jpn. Kokai Tokkyo Koho JP 2002322071 A2 20021108, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-130722 20010427.
AB The invention relates to a **bee venom injection** compn. for treatment of rheumatoid arthritis, bone arthritis, gout, psoriasis, myalgia, chronic pain, and chronic inflammation, etc., wherein

the **injection** compn. contains active amts. of **bee venom** and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An **injection** compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

L34 ANSWER 2 OF 5 SCISEARCH COPYRIGHT 2003 THOMSON ISI

2001:747598 The Genuine Article (R) Number: 471VM. Allergen-derived T cell peptide-induced late asthmatic reactions precede the induction of antigen-specific hyporesponsiveness in atopic allergic asthmatic subjects. Oldfield W L G; Kay A B (Reprint); Larche M. Natl Heart & Lung Inst, Imperial Coll Sch Med, Dept Allergy & Clin Immunol, Dovehouse St, London SW3 6LY, England (Reprint); Natl Heart & Lung Inst, Imperial Coll Sch Med, Dept Allergy & Clin Immunol, London SW3 6LY, England. JOURNAL OF IMMUNOLOGY (1 AUG 2001) Vol. 167, No. 3, pp. 1734-1739. Publisher: AMER ASSOC IMMUNOLOGISTS. 9650 ROCKVILLE PIKE, BETHESDA, MD 20814 USA. ISSN: 0022-1767. Pub. country: England. Language: English.

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Allergen-derived peptides can induce T cell tolerance in naive and Ag-primed mice. This is preceded by transient T cell activation. In humans, intradermal administration of short allergen-derived T cell peptide epitopes provokes IgE-independent isolated late asthmatic reactions (LARs) in sensitized subjects. In this study, we determine whether, as in mouse models, such peptides produce hyporesponsiveness to rechallenge with peptides, or whole allergen, either clinically or in terms of in vitro T cell responses. We found that a second **injection** of cat allergen (Fel d 1)-derived T cell peptides was associated with a marked reduction, or absence, of the LAR, and that up to 40 wk was required for return to baseline values. The cutaneous late-phase reaction to whole cat dander was also inhibited, even in subjects who did not experience an initial LAR. These observations were associated with a significant decrease in peptide- and whole allergen-induced proliferation of PBMCs and the production of IL-4, IL-13, and IFN-gamma in cultures. Thus, allergen-derived peptides induce tolerance to subsequent peptide **injection** in the target organ (the lung), reduce late-phase cutaneous responsiveness to whole allergen, and alter in vitro T cell reactivity.

L34 ANSWER 3 OF 5 SCISEARCH COPYRIGHT 2003 THOMSON ISI

2001:992183 The Genuine Article (R) Number: 500LH. Inhibition of human T-cell responses by allergen peptides. Larche M (Reprint). Natl Heart & Lung Inst, Imperial Coll Sch Med, Dovehouse St, London SW3 6LY, England (Reprint); Natl Heart & Lung Inst, Imperial Coll Sch Med, London SW3 6LY, England. IMMUNOLOGY (DEC 2001) Vol. 104, No. 4, pp. 377-382. Publisher: BLACKWELL SCIENCE LTD. P O BOX 88, OSNEY MEAD, OXFORD OX2 0NE, OXON, ENGLAND. ISSN: 0019-2805. Pub. country: England. Language: English.

L34 ANSWER 4 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

2001064397 EMBASE **Bee-venom** therapy for treating **multiple sclerosis**: A clinical trial. Hauser R.A.; Daguio M.; Wester D.; Hauser M.; Kirchman A.; Skinkis C.. Dr. R.A. Hauser, Caring Med. and Rehabilitation Svcs., Beulah Land Natural Medicine Clinic, Thebes, IL, United States. Alternative and Complementary Therapies 7/1 (37-45) 2001.

Refs: 16.

ISSN: 1076-2809. CODEN: ACTHFZ. Pub. Country: United States. Language: English. Summary Language: English.

AB MS; from its initial attack, can progress from being merely a nuisance to becoming a severely debilitating disease in its later stages. Little is understood about its causation, etiology, and biochemical progression within the body. New hypotheses continue to proliferate, implicating CD4 T-cells, interleukins, and viral susceptibility; yet, none have been proven. Before substantial progress can be achieved in MS research,

scientists must identify this disease's specific etiology. This would allow the medical field to target pharmacotherapy to the specific disease etiology. Until this is accomplished, treatment remains merely guesswork. Therapeutic **bee-venom injections** on patients with MS, according to the results of this study, are effective in decreasing a patient's functional debilitation caused by the disease. The ROSS survey, using Friedman nonparametric statistical analysis showed significant improvements in balance, coordination, bladder and bowel control, upper- and lower-extremity strength, fatigue, endurance, spasticity and numbness over the 12-month trial using BVT. Of even more importance were that these symptomatic improvements carried over into improved ADLs. Statistically significant improvements were seen in walking, stair climbing, car transfers, bed transfers, toilet transfers, bathtub transfers, and bed positioning. The Karnofsky Performance Scale results improved from an initial score of 50 to 65, indicating that the people with MS in this study progressed from needing a considerable amount of self-care to needing a minimal amount. With more than 68 percent of patients enrolled in the study experiencing some kind of positive effects from the venom, it is clear that BVT is a promising therapeutic avenue for researchers of MS to pursue. Further research needs to be done with tighter controls on data collection before wholeheartedly embracing BVT as an answer for patients with MS. It is also clear that further study of the venom itself should be performed in order to determine the mechanism of action of the venom on MS, as this would lead to further research and therapeutic options.

L34 ANSWER 5 OF 5 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 1
78191901 EMBASE Document No.: 1978191901. Peripheral nerve changes induced by local application of **bee venom**. Saida K.; Mendell J.R.; Sahenk Z.. Div. Neurol., Dept. Med., Ohio State Univ., Columbus, Ohio, United States. Journal of Neuropathology and Experimental Neurology 36/5 (783-796) 1977.
CODEN: JNENAD. Pub. Country: United States. Language: English.

AB In an attempt to elucidate the pathogenesis of neurologic complications of hymenoptera stings a series of experiments were performed in rats and rabbits. The local application of honey **bee venom** to the sciatic nerve produced a spectrum of changes. At the site of venom **injection** severe Wallerian degeneration was seen. In addition there were focal areas of dissolution of the myelin sheaths also affecting the cytoplasm, plasma membrane and basement membrane of the Schwann cells. This change was similar to the 'smudged appearance' of myelin in tissue culture following incubation with sera from animals with EAE and patients with **multiple sclerosis**. The myelin sheaths proximal to the site of honey **bee venom injection** were separated into a honey-combed type pattern. Depending upon the plane of section these areas were composed of parallel and bisecting linear membranes and circular profiles arranged in a hexagonal array. This change was identical to that observed with the application of snake venom phospholipase A and lysophosphatidyl choline and resembled the vesicular disruption observed in myelin sheaths in experimental demyelinating conditions. In rabbits and rats immunized with **bee venom** no cross reacting antibodies to peripheral nerve myelin were seen. No evidence of delayed hypersensitivity to myelin was seen in Lewis rats following **injection** of peripheral nerves with honey **bee venom**. These studies indicate that high concentrations of **bee venom** in close proximity to peripheral nerves could produce local changes in the nerve leading to a mononeuropathy. The pathogenesis of the diffuse CNS and PNS demyelinating conditions remains to be elucidated.

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L35 1 L13 AND LUPUS

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L35 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
2002:847709 Document No. 137:342129 **Bee venom** compositions for apitherapy. Kim, Christopher M. (USA). Jpn. Kokai Tokkyo Koho JP 2002322071 A2 20021108, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-130722 20010427.
AB The invention relates to a **bee venom injection** compn. for treatment of rheumatoid arthritis, bone arthritis, gout, psoriasis, myalgia, chronic pain, and chronic inflammation, etc., wherein the **injection** compn. contains active amts. of **bee venom** and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An **injection** compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

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L38 ANSWER 1 OF 5 MEDLINE DUPLICATE 1
2003168961 Document Number: 22573213. PubMed ID: 12686753. **Bee Venom** Induces Apoptosis and Inhibits Expression of Cyclooxygenase-2 mRNA in Human Lung Cancer Cell Line NCI-H1299. Jang Mi-Hyeon; Shin Min-Chul; Lim Sabina; Han Seung-Moo; Park Hi-Joon; Shin Insop; Lee Ji-Suk; Kim Kyoung-Ah; Kim Ee-Hwa; **Kim Chang-Ju**. (Department of Physiology, College of Medicine, Kyung Hee University.) J Pharmacol Sci, (2003 Feb) 91 (2) 95-104. Journal code: 101167001. ISSN: 1347-8613. Pub. country: Japan. Language: English.
AB To investigate whether **bee venom** (BV) induces apoptosis, the 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide assay, terminal deoxynucleotidyl transferase- mediated dUTP nick end-labeling assay, 4,6-diamidino-2-phenylindole staining, flow cytometric analysis, and DNA fragmentation assay were performed on NCI-H1299 lung cancer cells treated with BV. Through morphological and biochemical analyses, it was demonstrated that NCI-H1299 cells treated with BV exhibit several features of apoptosis. In addition, reverse transcription-polymerase chain reaction and prostaglandin E(2) (PGE(2)) immunoassay were performed to verify whether BV possesses an inhibitory effect on the expression of cyclooxygenase (COX) and PGE(2)synthesis. Expression of COX-2 mRNA and synthesis of PGE(2) were inhibited by BV. These results suggest the possibility that BV may exert an anti-tumor effect on human lung cancer.

L38 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
2002:847709 Document No. 137:342129 **Bee venom** compositions for apitherapy. **Kim, Christopher M.** (USA). Jpn. Kokai Tokkyo Koho JP 2002322071 A2 20021108, 12 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2001-130722 20010427.
AB The invention relates to a **bee venom** injection compn. for treatment of rheumatoid arthritis, bone arthritis, gout, psoriasis, myalgia, chronic pain, and chronic inflammation, etc., wherein the injection compn. contains active amts. of **bee venom**

and local anesthesia. A cream and patch compns. contg. **bee venom** are also disclosed. An injection compn. contg. **bee venom** and lidocaine hydrochloride (1:1) was administered to a patient with rheumatoid arthritis.

L38 ANSWER 3 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
1994:190290 Document No.: PREV199497203290. Apitoxin (**bee venom**) therapy for chronic pain. **Kim, Chistopher M.**. Monmouth Pain Inst. Inc., Red Bank, NJ 07701 USA. Acupuncture & Electro-Therapeutics Research, (1993) Vol. 18, No. 3-4, pp. 264-265. Meeting Info.: 9th International Symposium on Acupuncture and Electro-Therapeutics New York, New York, USA October 14-17, 1993 ISSN: 0360-1293. Language: English.

L38 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
1989:429996 Document No.: BA88:88254. **BEE VENOM** THERAPY FOR ARTHRITIS. **KIM C M**. MONMOUTH PAIN INST. INC., RED BANK, N.J., U.S.A. 07701.. RHUMATOLOGIE, (1989) 41 (3), 67-72. CODEN: RHUMAY. Language: English.
AB **Bee Venom** therapy for arthritis remains somewhat controversial. Unfortunately, there are very few controlled studies available to guide clinical practice. One Hundred and Eight patients with longstanding history of arthritis (RA or OA) who failed to respond to conventional medical treatment were used as subjects (Sept. 85 to Sept. 87). Participation was on a voluntary basis as denoted by informed consents from all subjects. All subjects were tested for possible allergic reaction before initial treatment. 0.1 ml. standard BV-10 was injected intradermally twice a week. The number of injections increased gradually each subsequent treatment until evaluation showed markedly improved or completely resolved. Pain was most common problem with subjects. Pain measure included the McGill Pain Questionnaire and Visual Analog Scales. Clinical evaluation included serial physical examinations and the thermographic findings. Each subject was followed 6 months to 2 years after finished treatment. Most of subjects, showed slight improvements after 3rd session and marked improvement average 12th treatment. Total 33,644 injections were given. No clinical complications or serious side effects were observed in any subjects who participated in the study. It was concluded the **bee venom** therapy is safe, effective and has no serious side effects, as long as a person is not allergic to **bee venom**. The preliminary results highly suggest that **bee venom** therapy is a new alternative approach for arthritis victims who failed to respond to the conventional medical treatments.

L38 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
1987:391087 Document No.: BR33:71227. **BEE VENOM** THERAPY FOR ARTHRITIS AND NEURALGIAS. **KIM C M**. MONMOUTH PAIN INST., 46 ENGLISH PLAZA, RED BANK, N.J.. FIFTH WORLD CONGRESS ON PAIN, HAMBURG, WEST GERMANY, AUGUST 2-7, 1987. PAIN. (1987) 0 (SUPPL 4), S262. CODEN: PAINDB. ISSN: 0304-3959. Language: English.

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	232.68	232.89

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-14.32	-14.32

STN INTERNATIONAL LOGOFF AT 13:11:40 ON 28 APR 2003